

Spring Issue 1998

Interagency Task Force on E. Coli, Monitoring Network Ready for 98 Swimming Season

Starting in March 1998, one of the largest monitoring networks in northwest Indiana will begin sampling for *E. coli* in the Indiana Lake Michigan watershed. The monitoring will be conducted voluntarily by several public and private entities to try to help identify where sources of bacteria that might be contributing to "beach closings" are originating. The project is scheduled to continue into the fall of 1998. A trial-run was conducted last fall.

October 1997 was a busy month for eighteen different public and private waste water treatment facilities and health departments in Northwest Indiana. These facilities along with the Indiana Dunes National Lakeshore sampled for E. coli bacteria, at 75 sites in Lake Michigan and its tributaries, in Lake, Porter, LaPorte, St. Joseph, and Elkhart Counties each Wednesday during October. The voluntary effort is lead by the Point Source Committee of the Interagency Task Force on E. coli. Michael Kuss, environmental engineer of IDEM, chairs the Point Source Committee.

Kuss said "the monitoring in October was an extraordinary community effort. Facilities volunteered their time and money to collect and analyze samples." Each facility sampled upstream and downstream of its outfall, as well as at the outfall itself. The monitoring completed in October was a pilot to work out the details of the sampling network so it would be ready in time for the swimming season this summer. Kuss said "The participating facilities have already agreed to conduct the full scale monitoring project starting in March 1998." The Point Source Committee is considering to attempt the inclusion of sites and participation in neighboring Illinois and Michigan communities.

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Kuss compiled the sampling results from each of the facilities and also identified the amount of rain the area received within 108 hours prior to sampling. Kuss told the Interagency Task Force on E.coli, at its December 3 meeting, that October was a relatively dry month so results can act as baseline data as the monitoring plan continues next year. However, there were several days when rain was recorded near the end of the month, and the E. coli levels appeared to be elevated in most tributaries as a result. Kuss said it is also worth noting that none of the 64 total Lake Michigan samples collected at various beaches and harbors in near shore Lake Michigan exceeded the 235 colonies of E. coli / 100 ml water bathing beach standard established by EPA. Results from the monitoring completed during 1998 will provide data to help isolate sources of *E. coli* within the watershed.

Participants in the monitoring plan include:

Bethlehem Steel Chesterton Wastewater Treatment Facility East Chicago Sanitary District Elkhart Wastewater Treatment Facility Gary Sanitary District Hammond Wastewater Treatment Facility Indiana Dunes National Lakeshore Inland Steel Lake County Health Department LaPorte County Health Department LTV Steel Michigan City Sanitary District Midwest Steel Mishawaka Wastewater Treatment Facility Portage Water Reclamation Facility Porter County Health Department South Bend Bureau of Environmental Services US Steel Valparaiso Pollution Control Facility

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What's on Shore Next: Shipwrecks - Part I See Summer 98 issue of Indiana Shorelines

Improving the Quality of Life in Northwest Indiana

Recently local governments, business leaders, social service providers, environmental advocates, and several academic institutions in the Northwest Indiana metropolitan region have formed the Quality of Life Council.

The Council stems from a series of five round table meetings on the subject of sustainable development which were sponsored by Indiana University Northwest. The public and private partnership formalized as the Quality of Life Council (QLC) now promotes comprehensive sustainable development in Lake, Porter, and LaPorte Counties.

Maria Hibbs, member of the QLC Executive Board and the Director of Public Affairs at Inland Steel explained "it was discovered through the round tables that regional solutions are needed for metropolitan development, and to effectively deal with effects of degradation, poverty, and political fragmentation in our region."

To carry out its mission, the Council will foster sustainable development through: (1) building and maintaining a healthy environment through regionwide programs improving air quality, water quality, pollution prevention, and the disposal, reduction, and elimination of solid waste and toxic waste. (2) Conserving land resource by promoting controlled growth, regional land use policies, greenways, and mass public transportation. (3) Developing and maintaining economic health through brownfield redevelopment, eco-industrial park development, and developing or attracting environmentally sound and globally competitive business and industry. (4) Serving a diverse and changing population by encouraging policies to reduce urban core poverty, promote welfare to work, encourage affordable housing, and advance crime prevention and community policing. (5) Managing the region by promoting consensus on clear policies and agreements to pursue mandated changes to meet established regional goals.

The Council has begun the improvement process. Two task forces have been formed to support development of a regional transportation authority and to supplement regional brownfield activities. The task forces will report to the Council at its meeting in March.

The topics being addressed by the Council surfaced during the round table process. Other challenges impacting the quality of life were also identified. Dr. Alan Harre, chair of the Quality of Life Council and President of Valparaiso University explained, the Council "now will try to address the issues in the order in which they were placed by the roundtables."

Hibbs says the goal is to approach issues with good research and credible data, and to develop solutions through consensus. As the QLC looks at new issues, new task forces will be formed. Recommendations can then be passed on to appropriate levels of government. "The Quality of Life Council is a good forum to bring business, environment, government, planning, and academic interests together."

Membership of the Council consists of representatives from six categories: (1) business and labor; (2) community and social services; (3) elected officials; (4) environmental advocates; (5) universities and colleges; and (6) at-large members. Chairmanship of the Council rotates among six academic institutions: Calumet College, Indiana University Northwest, Ivy Tech State College, Purdue North Central, Purdue University Calumet, and Valparaiso University. The Northwestern Indiana Regional Planning Commission (NIRPC) is the fiscal agent of the Council and Barbara Waxman of NIRPC, the Council's director.

The Council is seeking funds from the US EPA Sustainable Development Challenge Grant Program for three interrelated projects: (1) a comprehensive metropolitan area sustainable development plan; (2) creation of quality of life indicators; and (3) a technical plan for the elimination of sprawl and uncontrolled land use in Northwest Indiana.

Hibbs says, "it's a healthy endeavor. We're approaching issues with aim of improvement and learning how we can work together to make something positive happen."

Quality of Life Council meetings are held quarterly at the Indiana University Northwest Conference Center. The Council will meet again June 5, 1998. Questions about the QLC can be directed to Ms. Waxman at (219) 763-6060.

Public Hearings Held On Gypsy Moth Quarantine Proposal

Public hearings were held in late February to consider a proposed rule to a set a quarantine process for the anticipated Indiana invasion of gypsy moths. One of the hearings was held in Michigan City.

The gypsy moth is an exotic species from Europe which has slowly spread westward following its 1869 accidental introduction in Massachusetts. Today, the gypsy moth has established itself throughout most of the northeastern states, including Michigan and much of Ohio.

The gypsy moth feeds on a variety of tree and plant species. Some of its most preferred host plants include oaks, apples, and box elders, and there is particular concern for its impact upon tamarack. Other hosts include maple and jack pine.

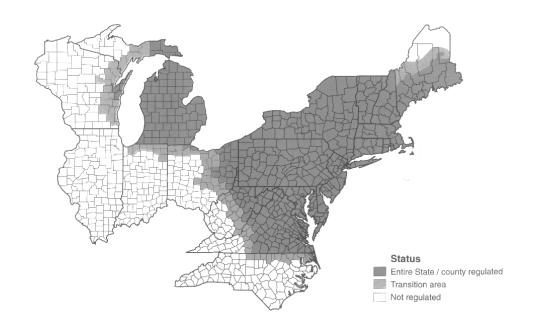
Gypsy moths can cause spring defoliation of canopy trees, resulting in increased soil erosion. Because gypsy moths defoliate so early in the season, they are more likely to result in the mortality of a tree than other insect pests such as webworms or Japanese beetles. Although the impact of gypsy moths varies greatly depending upon geography, treatment, weather, and other fac-

tors, a rough average is that a 30% mortality may result to oaks and other species infested with the insect.

During the public hearing on February 27 in Michigan City, State Entomologist, Robert Waltz, was asked about natural controls for the pest. He said many common predators feed upon gypsy moths but are insufficient to control their spread. Examples of predators include mice, wasps, and some flies. "We have a lot of things that attack it, but nothing that controls it."

Waltz added that gypsy moths may be bad news for trout fishermen as well. The larvae make "nice happy fish" in trout streams. As a result, anglers retraps are set throughout the state and also are used as a measure of the insect's spread. Unfortunately, traps demonstrate the insect is spreading at an alarming rate. Fewer than 6,000 male moths were trapped in Indiana in 1996. In 1997, the number exceeded 60,000.

Waltz said there are three basic classifications for the degree of gypsy moth infestation. Northern Indiana is now in a "transition zone" from a condition relatively free of gypsy moths to a condition of "infested areas" with "tremendous populations." Currently, said Waltz, "Indiana is just the tip of the iceberg; there is much more to come." Waltz said the treatment methods of the past would be unable to withstand the



port that areas with high gypsy moth concentrations often suffer slow fishing.

One reason the gypsy moth has not expanded more rapidly is that female moths cannot fly. The female crawls to a protected site to lay from 500 to 1,000 eggs in a mass. The egg mass can travel from an infested area on cars, trucks, and campers. The insect can also be blown to new territory by a strong wind.

For the past two decades, Indiana has fought sporadic outbreaks of gypsy moths using a variety of techniques, including traps for male moths. Those wave of infestation now at Indiana's borders.

The rule proposal for quarantine would authorize Indiana to set quarantines on a countywide basis but does not yet establish a quarantine in any particular county. In the absence of a state rule, gypsy moth quarantines are set by federal regulation through the US Department of Agriculture's Animal and Plant Health Inspection Service ("APHIS"). The federal regulations would quarantine the entire state rather than a county or counties, meaning that persons in counties free of gypsy moths would be

subject to quarantine requirements. Businesses and private citizens in a quarantined area, moving regulated articles to an area free of gypsy moths, must take measures to assure these articles do not contain gypsy moth larvae or eggs before moving.

Perhaps because the alternative to state regulation on a countywide basis is federal regulation on a statewide basis, no one spoke at the public hearings in opposition to the rule proposal. If approved by the Natural Resources Commission this spring, the proposal would be forwarded to the Attorney General for a ruling as to legality, and if approved, to the Governor for his consideration.

The largest gypsy moth populations in Indiana today are in the northeastern part of the state, and a county or counties in northeastern Indiana seem the most likely to be quarantined in the near future. But populations have increased recently in LaPorte County and Porter County, and a gypsy moth infestation is also moving southward along the western coast of Lake Michigan through Wisconsin and into Illinois. In the absence of some remarkable and unexpected breakthrough in their control. the southern shore of Lake Michigan appears destined to soon suffer the challenges of gypsy moths.

For additional information on gypsy moths, contact the DNR's Division of Entomology and Plant Pathology at (317) 232-4120 or USDA's Plant Protection and Quarantine. http://www.aphis.usda.gov/ppq

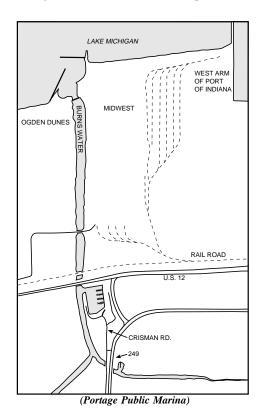
The "Ten Most Violated Boating Laws on Lake Michigan" in Boating Laws On-line

What tickets are boaters most likely to get on the Indiana waters of Lake Michigan? Using statistics from DNR's Division of Law Enforcement and interviews with the US Coast Guard, the "Ten Most Violated Boating Laws

on Lake Michigan" are compiled and included in a new on-line service of the Lake Michigan Coastal Coordination Program. The service can be accessed at http://www.ai.org/dnr/boating

Other features of the new service include Emergency Telephone Numbers, Access to Marinas and Gaming Boats, and Services Offered by Public and Private Marinas. The service also provides ready access to the laws themselves-the major state and federal statutes and regulations which apply to the recreational boater.

But what are the ten most common violations? One is operating a boat either under the influence of alcohol or another drug, which can potentially result in felony convictions at state and federal law. Another is operating a boat at night in excess of ten miles per hour,



a state law infraction. The other eight are now on-line.

Overview of the "Public Trust Doctrine" in Indiana

Following is the second of a twopart discussion of the "public trust doctrine." In the winter issue of Shorelines,

the historic backdrop for the concept was explored in the Origins of the "Public Trust Doctrine." The winter article noted the "public trust doctrine" was rooted in Roman civil law and in the idea the sea was a navigable water "common to all mankind." Adoption of Roman concepts of navigability and public trust were then traced through English common law and to the United States. In the United States during the last century, the concepts were extended to all the states through the "equal footing doctrine" and were expanded from salt waters to include freshwater rivers and lakes.

Within this legal framework, Indiana entered statehood in 1816. Enjoying an "equal footing" with other states, Indiana received title to its navigable waters and to the lands beneath them. In 1918, the Indiana Court of Appeals made an important judicial interpretation, applying the principles if not the exact phraseology of the "public trust doctrine." The Court in Lake Sand Co. v. State upheld an injunction against an Illinois corporation which was removing sand and gravel from Lake Michigan. The Court reasoned the lake was navigable, and as a result, was held by the state in "trust" for all citizens.

In State v. Kivett decided in 1950, the Indiana Supreme Court applied decisions by the United States Supreme Court and determined the test for navigability was whether a lake or river "was available and susceptible for navigation according to the general rules of river transportation at the time Indiana was admitted to the Union." Applying this test, the Court found the White River in Morgan County to be navigable. As a result, the Court said ownership of the river bed rested with the state, and the general public could enjoy and use its surface waters. The Court also concluded federal common law applied to issues of navigability.

By statute, the Indiana General Assembly has, in effect, applied the "public trust doctrine" to "public freshwater lakes." Examples of "public freshwater lakes" include Cedar Lake and Fancher Lake in Lake County, Long Lake in Porter County, and Pine Lake in LaPorte County. The state holds "all public freshwater lakes in trust for the use of all of the citizens of Indiana for recreational purposes." In *Bath v. Courts*, the Indiana Court of Appeals applied a statute governing "navigable" streams to help decide a dispute on a public freshwater lake.

The Indiana Natural Resources Commission is the state agency which has "general charge" of Indiana's navigable waters. Similarly, the Commission is the state agency primarily responsible for rules pertaining to the administration of navigable waters. The Commission also handle disputes at the administrative level both for navigable waters and public freshwater lakes.

In a 1994 order from an administrative case before the Commission, the application of the public trust doctrine to Lake Michigan was acknowledged. In 1997, the Commission adopted rules which specified the DNR must consider the "public trust doctrine" before issuing a license for an activity within navigable waters. The same rule also reflected concern for private property interests. It said the DNR must consider the "likely impact" of a license upon "the applicant and other affected persons."

In four administrative cases decided since 1990, the Commission has applied the public trust doctrine to disputes on public freshwater lakes. For the most part, these decisions do not review the "public trust doctrine" in any detail. A case decided in October 1997, however, offered an analysis of the doctrine. In *Lauder, et al. v. DNR*, the Commission found the "public trust doctrine in natural resources law" results in "state ownership of certain lands and waters.

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When Indiana achieved statehood in 1816, it obtained title to its navigable waters." The Commission said at "the core of the public trust doctrine is the fiduciary obligation of the state to hold state sovereign resources for the benefit of the general public. State sovereign ownership and the public trust doctrine are founded upon the necessity of preserving to the public the use of navigable waters from private interruption and encroachment."

At the same time, the Commission reasoned in Lauder that application of the doctrine was not an absolute. Although typically public trust waters could not be granted to a landowner for a private purpose, well-established exceptions to the prohibition included "wharves, piers, docks, and other structures in aid of commerce." In addition, fill placed for a private purpose might be authorized, particularly if the amount of fill is modest and a public benefit results. Upon the facts of the Lauder case, the Commission concluded lakefill should be authorized because the effect was to make an applicant's seawall harmonious with adjacent seawalls and to put the seawall at a safe distance from a county roadway.

The Commission also recognized in *Lauder* the rights of private property owners to lands outside the ordinary high watermark. "The public has no right or privilege of perpendicular access to cross or trespass upon privately owned land in order to reach the water." The Commission cited a New Hampshire decision which said a "property owner adjacent to a lake" could control access to "lands outside the shoreline."

The "public trust doctrine" has been recently cited by federal agencies in determinations applied to public waters. For example, the United States Army Corps, Detroit District, reviewed and rejected an early configuration proposed for the riverboat casino at East Chicago, based on what the Corps saw as a violation of the public trust doctrine.

Natural Resources Commission Hears Blue Ribbon Advisory Panel's Permit Streamlining Resolution

During its final meeting last August, the Blue Ribbon Advisory Panel for Lake Michigan issues adopted a resolution directed to permit streamlining. See Fall 1997 SHORELINES. The Natural Resources Commission (NRC) met on January 20, 1998, and reviewed the panel's efforts. Dawn Deady, Coordinator of the Lake Michigan Coastal Coordination Program, explained that the Blue Ribbon Advisory Panel discussed several issues but focused primarily upon permit coordination and streamlining. In particular, the panel encouraged a coordinated effort to assure appropriate permitting of construction activities along waterways.

According to Deady, the panel said permit applications should be processed in a timely fashion but not at the expense of important environmental concerns. She explained one effort to respond to the panel's resolution had begun with discussions involving the Lt. Governor's Office, the Lake Michigan Marina Development Commission (LMMDC), and the Indiana Department of Environmental Management (IDEM).

Steve Lucas, Director of the NRC's Division of Hearings, said that in addition to the panel's initiative, the LMMDC has presented a resolution directed to permit coordination. Steve Rogers of the Lt. Governor's office helped bring together representatives of the LMMDC, IDEM, and DNR to respond positively to both resolutions. Lucas explained a determination was made to seek a Memorandum of Understanding ("MOU") between IDEM and DNR to help move permit coordination forward, with the understanding the NRC and Water Pollution Control Board also had important state regulatory roles. In addition, the Army Corps of Engineers, the Environmental Protection Agency, and the US Coast Guard would be invited to participate.

Steve Cecil, member of the Commission and an environmental specialist with the Indiana Department of Transportation, said "early permit coordination" was a key issue. He said he also understood the Lake Michigan area was of particular concern. "Something good will come out of this effort I'm sure." At the same time, he expressed hope the initiative would look to the state, generally, since issues of permit coordination have an important impact on all the regulated community throughout Indiana.

Chairman Mike Kiley expressed agreement with Cecil but also reflected that in some ways "the needs along Lake Michigan are unique." He noted waterway construction law and navigation law for Lake Michigan differed from the law for the state's inland lakes.NRC member, Jane Anne Stautz reflected that, to

be effective, the permit coordination initiative would require a commitment of staff and funding. She urged that a realistic approach be taken and personnel and monetary costs identified.

In response to the request for guidance by the Lake Michigan Coastal Coordination Program, Chairman Kiley reflected he felt an MOU was an appropriate response to the panel's resolution. "I know many of the members of the panel personally and understand how busy they are and respect their knowledge of and dedication to Lake Michigan issues." He directed staff to forward the panel's resolution to the Governor and to continue developing the MOU.



The Lake Michigan Coastal Coordination Program is an effort by the State of Indiana to improve communications and cooperation among the agencies who participate in activities in the Lake Michigan coastal region. See http://www.dnr.state.in.us/ lakemich/index.htm

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